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ABSTRACT

Over the last 20 years, policy changes have reduced the use of highly restrictive services for children with severe disabilities. This study explores several issues associated with these changes. It asked whether students referred to a Behavioral Skills Program (BSP) exhibit a level of behavioral and emotional problems that is higher than the general population of students with Behavioral Disorders (BD). It documents the outcome of treatment by measuring academic achievement, behavioral assessments, and other goals, and investigated whether or not differential progress depended on the types of behavioral goals. Data were collected on elementary and secondary students at a public school's BSP. Results indicated that students referred to BSP exhibit more behavioral and emotional problems than the general population of students with BD. These students' levels of individual and family risk factors were also higher than the general population's. However, outcomes of treatment, which were made by measuring changes in academic achievement, behavioral assessments, performance of behavioral goals, and overall teacher performance, reflected significant gains in academic achievement. Students in the program had more success in certain types of behavioral goals compared to other types of goals. Overall, teacher ratings indicated progress in behavior and academic areas. Contains 37 references. (RJM)

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Running head: DAY TREATMENT PROGRAM EFFECTIVENESS

Day Treatment For Emotionally and Behaviorally Disturbed Children: A Program Evaluation

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Abstract

Data collected in academic years 1993/94 and 1994/95 provide the basis for analysis of the characteristics and the progress of elementary and secondary students served at the Lincoln Public Schools (LPS) Behavioral Skills Program (BSP). This study sought to answer several pertinent questions. First, it was determined that students referred to BSP exhibit a level of behavioral and emotional problems based on teacher ratings of the Child Behavior Checklist (CBCL-TRF, Auchenbach & Edelbrock, 1991) and experience levels of individual and family risk factors that were higher than the general population of students with Behavioral Disorders (BD). Second, this study documented the outcome of treatment by measurement of change in academic achievement, behavioral assessments, performance of behavioral goals, and overall teacher performance ratings. Pre-post comparison of the Kaufman Academic Achievement-Brief Form Test (KTEA) using forward dependent multiple t-tests found significant gains in academic achievement. A split plot design analysis of variance, ANOVA, of pre-post CBCL's and improvement on Individual Education Plan (IEP) goals showed elementary students made gains and no student group exhibited significant deterioration. The analysis also showed medium and large effect sizes for several CBCL and IEP goal results. It was determined that students in this program had relatively more success in certain types of behavioral goals compared to other types of goals. Finally, overall teacher ratings indicate students were progressing in behavior and academic areas.

Day Treatment For Emotionally and Behaviorally Disturbed Children: A Program Evaluation

In the last 20 years social, legal, and political policies have moved to reduce the use of highly restrictive services for children with severe disabilities. However, most children and youth with severe emotional and behavioral disorders (EBD) continue to need long term treatment and support on an intensive basis. These needs have created a demand for middle intensity, community based services like day treatment (Baenen, Stephens, & Glenwick, 1985). In order to reduce dysfunctional behavior and social maladjustment it is necessary to serve these children at a level appropriate for the severity of the disability they experience (Knitzer, Steinberg, & Fleisch, 1990).

Differences in psychological, educational, and social service definitions of EBD make it difficult to identify the level of disability a child is experiencing and to make appropriate placement decisions. Children and youth with EBD exhibit a wide range of maladaptive behavioral and emotional characteristic psychopathology, and family and social problems. It is clear that most children with EBD have frequent, persistent, and highly intensive problems across all environmental settings from a early age (Nelson and Pearson, 1991). Programs need to asses the level of severity of problems so that the least restrictive and most appropriate placement is made.

Behar (1990) stated that many times children with EBD are placed in more restrictive settings than might be necessary. These children are placed in highly restrictive settings more frequently than other disability groups and are usually place in highly restrictive settings before less restrictive interventions are attempted. Koyanagi & Gaines (1993) found that children and youth with EBD are more than four times more likely to be educated in facilities outside their regular school (e.g. home school). They also found that over 20% of children with EBD were in school placements outside their home school but only 4.9% of all other disability groups were in out-of-home placements. Even when students remain in the home school only 10 to 15% were placed in regular classrooms compared to 31.5% of all other disability groups. Children with EBD were placed in home bound educational alternatives more than any other disability group.

Knitzer (1982) stated the children with EBD are underidentified and underserved. There is very little information concerning objective, standardized assessment methods that could identify the level of severity of a child's behavioral and emotional problems. As a result programs, such as day treatment may be serving children that could be served in less restrictive settings or should be served in more intensive treatment settings. Standardized assessment of the severity of problems behaviors and the level of risk factors a child experiences are ways that a program may determine that children referred are appropriate for placement.

The number and type of individual and family risk factors a child experiences are related to the presence of severe behavioral and emotional maladjustment. Siefer, Sameroff, Baldwin, and Baldwin (1992) state that children experiencing three risk factors or more are significantly more likely to have behavioral and emotional maladjustment. High levels of individual, family, and social risk factors are evident in cases of children with severe EBD (Epstein, Cullinan, Quinn, & Cumblad, 1994; Singh, Landrum, Donatelli, Hampton, & Ellis, 1994; Koyanagi & Gaines, 1993; Nelson & Pearson, 1991; Barocas, Seifer, Sameroff, Andrews, Croft, & Ostrow, 1991; Grizenko & Sayegh, 1990).

Children with EBD experience multiple family and individual risk factors. Illbeck (1991) reported on characteristics of children with EBD in the state of Kentucky. It was found that the majority of families with children with EBD live in poverty, have experienced divorce, and had a histories of family violence or of chemical dependency. Many children with EBD had previous psychiatric hospitalization or were physically or sexually abused. Epstein et al (1994) reported that 60% of youth with EBD had been charged for law violations. Grizenko & Sayegh (1990) found 70% of day treatment admissions had experienced at least one family stress factor.

Children with EBD commonly experience other risk factors. The problems of these children most often come to light in educational settings though the family may have struggled with these problems throughout the child's early development (Koyanagi & Gaines, 1993). Children with EBD exhibit high rates of

school failure . Illbeck (1991) reported the 69.9% of children served with EBD had a history of below grade academic achievement and 36.3% were frequently expelled or suspend from school.

As a group, children with EBD earn lower grades when compared to other disability groups. Koyanagi & Gaines (1993) stated the 43.9% of children with EBD received failing grades. The drop-out rate for students with EBD was 43.24% and only 36.8% of those children who entered secondary education graduated. One bright spot was that 60% of youth with EBD who graduated were employed two years after graduation while only 37.9% of youth with EBD who dropped out were employed. Clearly, completing education is associated with positive outcomes for employment (Koyanagi & Gaines, 1993; SRI, 1991).

Children with EBD experience a wide variety of psychological diagnoses. These children usually come to the attention of educational, social service, legal, or mental health professionals due to aggressive behaviors that endanger others or themselves (Epstein, et al 1994). The most frequent diagnosis for children with EBD are disruptive behavioral disorders Attention Deficit Disorder (ADD) and mood disorders. Anxiety disorders, adjustment disorders, substance abuse, personality disorders, and psychotic disorders are also frequent reasons for referral. In addition, these children are often identified as having a developmental disability or a learning disability. A majority of these children have received medication for behavioral disorders (Singh, et al 1994; Epstein, et al. 1994).

Children with EBD and their families usually are receiving special services from multiple agencies (Nelson & Pearson, 1991). Epstein, et al. (1994) examined children with EBD ages 9 to 19 and found that 32% were receiving mental health services, 25% were receiving child and family social services, and 59% had a history of residential placement. Singh et al. (1994) found that 73% of children with EBD had a history of psychiatric hospitalization and 91% had been seen in outpatient therapy.

While there is a good deal of information concerning the risk factors experienced by children with EBD the research on treatment outcomes is minimal. Despite the growth in the number of day treatment programs there has been little empirical study concerning treatment effectiveness. The results of the few studies published provide inconsistent results. Methodological problems prevent comparison of programs

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and identification of what treatment procedures are most effective. In fact few programs conduct any type of research concerning program effectiveness (Sayegh & Grizenko, 1991; Gable & Finn, 1986; Zimet & Farley, 1985; Cantwell, 1979). The lack of empirical research documenting treatment outcomes for children in day treatment settings leaves many unanswered questions (Kazdin, 1993).

Although research on day treatment outcomes is scant researchers are beginning to assess outcomes and some measures of success have been documented. Outcomes studies indicate that 70% to 90% of children treated in day treatment are returned to public schools depending on the type and severity of the presenting problems and other family and child characteristic (Baenen, et al 1986; Zimet & Farley, 1985; Halpern, Kissel, & Gold, 1978; Blom, Farley, & Ekanger 1973; Gold & Reisman, 1970, LaVietes, Cohen, Reen, & Ronall, 1965).

However, more recent studies indicate that less than 10% of children with EBD actually reintegrate into regular school settings (Epstein, et al. 1994). Many students are not satisfactorily discharged and most continue to exhibit problems that require long term, intensive special education, psychotherapy, and social services after dismissal (LaVietes et al 1965, Halpern, et al, 1978; Gold & Reisman,1970).

Reintegration rates alone have proven to be less than satisfactory criteria of success. Reintegration rates may exaggerate measures of effectiveness. This is because reintegration rates may not equate with positive change in behavioral or academic performance. Reintegration rates can also depress measures of success. These rates can lag behaviors rating improvements or behavior change may not be sufficient for the child to return to regular school settings. Reintegration rates do not reflect how many students with EBD continue to be seen as poorly adjusted by teachers and parents or document the number of students who require long term special educational support (Halpern et al.,1978). Finally, reintegration may be hampered due to school policy or the lack of appropriate services in regular school settings to facilitate reintegration (Baenen, et al.1986).

Researchers have began to use a variety of data other than reintegration rates to measures treatment success. Swan & Wood (1976) found that children treated in day treatment achieved 95% of

below entry level stage objectives, 80% of entry stage objectives and 10 to 50% of subsequent stage objectives. Grizenko & Sayegh (1990) found that results of standardized assessment indicated children in day treatment showed significant improvement in behavioral, academic, personality, and family parameters. Zimet, et al.(1980) found that school behavior, academic performance, IQ, home behavior, and self concept all improved during placement and follow up.

Positive outcomes of day treatment are associated with children functioning at relatively high developmental levels, family motivation to support their child, early intervention, and placement in the program for a year or longer. Programs that include teachers and parents in the treatment process are associated with positive outcomes (Grizenko & Sayegh, 1990; Kosturn, Brown, & Brown, 1990; Gabel, Finn, & Ahmad 1988; Ginsberg, 1987; Cohen, Bradley, & Koler 1987; Prentice-Dunn, Wilson, & Lyman, 1981; Halpern et al.1978; LaVietes et al.1965).

Loene (1984) found most successful graduates of day treatment were either in school or employed and living with a parent. Also these students reported having benefited from their treatment by feeling improved capacity to relate to others, better feelings about self, and specific plans for the future despite having continuing academic difficulties and requiring continued support services after discharge.

Some studies indicate that improvement in academic performance may be as important as behavior improvement in producing positive treatment outcomes. Day treatment, in generally, has a poor track record in creating academic improvement. Although decline in academic achievement for students in day treatment seems to stop, creating improvement in achievement is more difficult to produce (Epstein, et al 1994; Sayegh & Grizenko, 1991; Baenen et al.1986; Gable & Finn 1986).

There are many reasons day treatment programs generally fail to produce academic improvement. Most day treatment programs place emphasis on behavioral and emotional problems rather than on academic skills. Academic skills may take longer to develop than behavioral skills. Discharge is usually based on behavioral rather than academic progress. The lack of educational progress may also be due to reduced academic expectations for student with EBD or to immaturity in cognitive and emotional

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development of students. It may be critical to improve academic achievement before dismissal because academic adequacy is predicative of reintegration success (Gabel & Finn, 1986; Sayegh & Grizenko, 1991; Baenen et al. 1986; Wirth, 1987).

In summary, Zimet & Farley (1985) state that the proof of day treatment value is not just economic but that positive treatment outcomes are evident. Many children with EBD may never achieve significant change in behavioral and emotional adjustment to be fully integrated into regular school settings. It has been found that at the very least day treatment is as effective as more restrictive treatment placements and can provide services to students too severe for less restrictive settings (Grizenko & Sayegh, 1990; Rosenthal & Glass, 1990; Baenen, et al., 1986; Halpern et al., 1978; Cohen et al., 1987). The implications of literature is that day treatment programs should be systematically evaluated to assure that students referred are appropriately placed and that a variety of outcome measures should be employed to assess progress. This study is an effort on the part of the Behavioral Skills Program to achieve these goals.

Method

Data collected in academic years 1993-94 and 1994-95 provide the basis for analysis of the characteristics and the progress of elementary and secondary students served at the Lincoln Public Schools (LPS) Behavioral Skills Program (BSP). This study sought to answer three pertinent questions. First, it was determined whether students referred to BSP exhibit a level of behavioral and emotional problems and experience levels of individual and family risk factors that is higher than the general population of students with Behavioral Disorders (BD). Second, this study sought to document the outcome of treatment by measurement of change in academic achievement, behavioral assessments, performance of behavioral goals, and overall teacher performance ratings. Third it was determined if differential progress was achieved depending on the types of behavioral goals.

Participants

All students enrolled at BSP in the 1993/94 and/or 1994-95 academic year for which a complete set of data could be gathered were included as participants in the study. In 1993/94 there were 23 elementary

and 14 secondary students and in 1994/95 there were 36 elementary and 17 secondary students included. The students were in grades Kindergarten through ninth grade and identified as having a Behavioral Disorder (BD). In 1993/94 males made up over 97% of the participant group and in 1994/95 males were 94.3% of the participants. The ethnic make up of the participant group are reported on Table 1.

Table 1. Ethnic Make-up of Participant Group by Percent

	1993/94	1994/95
White/ European	67.6	66.0
African American	24.3	20.8
Native American	8.1	9.4
Latin/Hispanic	0.0	3.8

Procedure

Individual and family risk factors were collected using school records, court records and other official documentation were collected to determine the number and type of risk factors students had experienced. This information was compared to research findings documenting the number of risk factors associated with severe maladjustment and with similar data collected from other samples of students with BD in Nebraska and in other published research.

The level of problem behaviors were collected using the Child Behavior Checklist-Teacher Report Form (CBCL-TRF; Auchenbach & Edelbrock, 1991). These assessments were completed by home school teachers and BSP teachers at the beginning of the academic year or shortly after admission to determine initial levels of problem behaviors. Total problem scores, as well as, externalized and internalized behavior scores were compared to CBCL-TRF ratings collected by Conoley & Peterson (1989) on a state-wide sample of children verified as BD served in regular schools in Nebraska.

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Academic achievement was assessed based on student performance on the Kaufman Test of Education Achievement-Brief Form (KTEA; Kaufman and Kaufman, 1985) in reading, spelling, mathematics, and composite scores. The test was administered at the beginning of the academic year or shortly after admission and again at the end of the academic year.

Behavioral change was assessed by comparison of CBCL-TRF's completed at the beginning of the school year or shortly after admission and the results of a second set of ratings taken at the end of the academic year by both home school and BSP teachers. Behavioral change was also assessed by tracking the change of three behavioral goals from each participant's Individual Education Plan (IEP). These goals were tracked continually each classes period at BSP. A zero tolerance level was maintained. If the child, at anytime in the class period, did not achieve the goal it was marked as "not successful". Daily averages on these goals were converted to 8 week averages calculated 4 times over the course of the school year. Overall behavior and academic change was assessed by teacher ratings on a five point scale of perceived progress over the academic year. The scale range from 1 for significant deterioration to 5 for significant improvement.

The performance students exhibited on the various types of goals was analyzed to determine if there was any differential progress. IEP goals were coded based on a manual of IEP goals used by the Lincoln Public School District. The goal categories included classroom skills, mainstreaming and adjustment, self esteem and self concept, coping skills, peer and adult interactions, and personal responsibility.

Data Analysis

Descriptive statistics include mean length of stay in the program, the primary reason for referral, comparison of mean "T" scores on the CBCL-TRF to state-wide samples, percentage of individual and family risk factors experienced by participants, percentage of success on various types of behavioral goals, and teachers' overall ratings of success. Pre-post comparison of the Kaufman Academic Achievement-Brief Form Test (KTEA) using multiple forward dependent t-tests were used to assess gains in academic

achievement. A split plot design analysis of variance, ANOVA, of pre-post CBCL's and improvement on Individual Education Plan (IEP) goals were used to assess behavior change by group and over time. Medium and large effect sizes for CBCL-TRF and IEP goals are also reported.

Treatment

The Behavioral Skills Program (BSP) is a collaborative program conducted by Lincoln Public Schools and Lincoln/Lancaster Child Guidance Center in operation since 1986. The program provides and therapeutic services in home schools and intensive therapy and educational services in a self-contained site that students are bused to daily. Generally, students attend an hour or two a day at the home school and add time as appropriate for the student. The program is designed to focus on academic and behavioral skills development and the treatment of critical mental health issues.

Results

The Behavioral Skills Program provides a relatively long term placement for students with behavioral and emotional disorders. The mean length of stay in the program in the 1993/94 was 16.73 academic months and in 1994/95 the average length of stay was 15.77 academic months. By the end of the 1994/95 the longest length of stay was a 54 months.These figures did not include summer vacation months. Table 2 lists the primary reason for referral by percent.

Table 2. Reason for Referral by Percent

	1993/94	1994/95
Noncompliant/Disruptive	43.5	30.2
Aggressive/ Danger to Others	37.8	50.9
Danger to Self	---	3.8
Psychotic/Thought Disorder	5.4	11.3
ADD/Hyperactivity	8.2	3.8
Organic Disorder	2.7	---
Other	2.7	---

The results of the initial CBCL-TRF found that when both internalized and externalized ratings are included 69% of BSP students have behavior problem levels in the clinical range in 1993/94 and 57% in 1994/95. The CBCL-TRF yielded ratings of home school and BSP teachers that were significantly correlated (r=.55 -.51).

When compared to scores of a state wide sample of students verified as BD it was found that BSP students problem behavior ratings were higher. Table 3 shows the comparison between the BSP group and the state-wide group.

Table 3. Initial TRF Compared To State-Wide Sample (Conoley & Peterson, 1989)

State Sample	Average External T = 60
	Average Internal T = 50
BSP 1993/94	
Average Total T	Elementary = 67
	Secondary = 69
Average Internal T	Elementary = 66
	Secondary = 66
Average External T	Elementary = 65
	Secondary = 66
BSP 1994/95	
Average Total T	Elementary = 65
	Secondary = 67
Average Internal T	Elementary = 62
	Secondary = 60
Average External T	Elementary = 66
	Secondary = 72

Students served by BSP experience high levels of individual and family risk factors . Previous research indicate that the presence of three risk factors put children at risk of severe social maladjustment (Siefer, Sameroff, Baldwin and Baldwin, 1992). Table 4 displays the average number of individual and family risk factors experienced by group. Table 5 illustrates the comparison of the percentage of risk factors experienced for each year.

Table 4. Average Number of Individual and Family Risk Factors

	1993/94	1994/95
Elementary		
Individual Average	4.17	4.81
Family Average	4.35	6.14
Total Average	8.53	10.95
Secondary		
Individual Average	5.79	6.71
Family Average	5.64	5.59
Total Average	11.43	12.30

Table 5 Percent of Students with Particular Risk Factors

Risk Factor	Percent Yes 1993/94	1994/95
Individual Risk Factors		
Previous Hospitalization	73.7	71.7
Physically Abused	71.1	62.2
Sexually Abused	28.9	28.3
Chronic Runaway	15.8	15.0
Chronic Truancy	26.3	34.0
Suicide Attempt	7.9	13.2
Below Grade Achievement	84.2	81.1
Drug/Alcohol Abuse	13.2	24.5
Frequent Suspension/Expulsion	50.0	54.7
Drug/Alcohol Treatment	0.0	1.0
Felony Conviction	5.3	5.6
Current Probation	13.2	34.0
History of Violence	71.1	83.0
Sexual Perpetrator	10.5	13.0
Fire Setting	5.3	9.4
Previous Incarceration	7.9	5.6
Family Risk Factors		
Family at Poverty Level	68.4	71.7
From Divorce or Never Married Family	71.1	71.7
Three or More Siblings	7.9	28.3
Adopted	0.0	3.8
Single Parent	55.3	52.8
Psychiatric Parent History	36.8	20.7
Felony Parent Conviction	36.8	43.4
Siblings in Out of Home Placement	13.2	24.5
History of Family Violence	76.3	79.3
Family Chemical Dependency	65.8	64.2
Family History of Chem Depend Treat	13.2	41.5
Family Therapy Participation	31.6	41.5
Sibling Verified BD	23.72	26.4
State Ward	10.5	9.4

This study addressed the question whether students at BSP had significant change in academic achievement. In 1993/94 students made significant improvement in all three achievement subtests of reading, spelling, and mathematics, as well as in composite scores and in 1994/95 significant improvement was noted in reading scores. In addition the scores in 1994/95 were higher than the 1993/94 scores. Though no analysis was done for this change it is important to note the increase for further research. Not only do these results indicate students were maintaining normally expected achievement progress they were making marked increases in academic abilities. Table 6 and 7 illustrates this data.

Table 6 1993/94 Comparison of Beginning (Time 1) and End of Year (Time 2) KTEA Scores

Score/Time	N	Mean	Standard Deviation	Standard Error	t
Reading 1	30	83.8333	16.889	3.084	
Reading 2	30	89.5667	15.179	2.771	-4.15*
Math 1	30	81.8667	16.254	2.968	
Math 2	30	90.0667	15.743	2.874	-3.38*
Spelling 1	30	73.6000	11.458	2.092	
Spelling 2	30	77.1000	9.589	1.751	-2.88*
Composite 1	30	77.4333	13.984	2.553	
Composite 2	30	82.5000	11.702	2.137	-4.15*

*significant < .007 level

Table 7 1994/95 Comparison of Beginning (Time 1) and End of Year (Time 2) KTEA Scores

Score/Time	N	Mean	Standard Deviation	Standard Error	t
Reading 1	44	85.9545	16.546	2.494	
Reading 2	44	92.8864	21.727	23.275	-3.61*
Math 1	44	87.6364	16.457	2.481	
Math 2	44	87.7955	17.721	2.672	-0.08
Spelling 1	44	76.2045	12.700	1.915	
Spelling 2	44	76.0909	15.595	2.351	0.09
Composite 1	44	80.8182	14.589	2.199	
Composite 2	44	82.6136	17.166	2.5.88	-1.47

*significant < .007 level

The CBCL-TRF was used to detect significant change in teacher rating of the behavior problem level of students over the course of the year. In the 1993/94 data only 10 elementary and only 6 secondary students had complete data. Home school teachers Total T scores showed that elementary students worsened overtime (Time 1 Total T = 64.9; Time 2 Total T = 68.6; p< .05) while secondary students improved significantly (Time 1 Total T = 72.7; Time 2 Total T = 67.2, p< .05). In the 1994/95 data 32 elementary and 13 secondary students had complete data. BSP teachers rated elementary students as improving significantly (Time 1 Total T = 66.0; Time 2 T = 62.8, p<.000) and secondary students as worsening significantly (Time 1 Total T = 65.8; Time 2 Total T =69.1, p< .000). The results indicate that generally while CBCL-TRF scores did not improve significantly the scores did not worsen significantly either.

In the 1993/94 medium effect size were produced by BSP Total T (.07) and Internal T scores (.05) for grade group by time. Home school teachers ratings showed large effect sizes for Total T (.25), Internal T (.22) and External T (.18) for grade group by time. In the 1994/95 BSP teachers scores produced a large effect size for Total T scores (.30) and External T scores (.18) and a medium effect size for Internal T scores

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(.09). Home school teachers' ratings did not produce remarkable effect sizes. Generally speaking the results indicate that elementary students improved or stated the same while secondary students worsened in Total T and External T measures.

Assessment of behavioral change was also documented by tracking IEP goals. Figure 13 and 14 display the results of the four 8 week averages taken through out the academic year. Documentation of progress on IEP goals indicated that students made immediate improvement in behavior. Behavior changes plateau over time, but the plateaus were much better than the baseline levels of performance.

Overall, BSP students achieved IEP goals 80% of the time in the program. This compares favorably with students with BD studied by Conoley & Peterson (1989) which found that less severely disturbed students exhibited on task behavior 78% of the time. There was no significant change in achievement in IEP goals. There were, however, large effect sizes for performance by grade group (1993/94 = .22; 1994/95 = .40). This data shows that elementary students perform at a much higher level over all than secondary students.

A final measure of student performance were over all ratings of BSP teachers. In 1993/94 teachers indicated that 58% of students showed some improvement and 21 % remained the same, and 21% as deteriorating. In 1994/95 teachers rated 41.5% as showing some improvement, 22.6 % significantly improved, and 18.9% remained the same, and 16.9% as deteriorating.

A final question was whether BSP students made differential progress on various types of behavior goals. Table 8 displays the results.

Table 8. Accomplishment of Particular Goals

Goals	Mean Percent Accomplishment	
	1993/94	1994/95
Classroom Skills	84	78
Mainstreaming Adjustment	74	NA
Self Esteem	85	NA
Coping Skills	74	84
Peer/Adult Interaction	79	82
Personal Responsibility	76	76

The results showed that BSP students were relatively more successful on classroom skills goals and self esteem goals over other types of goals in 1993/94. In 1994/95 students were relatively more successful on performance of coping skills and peer/adult interaction..

Discussion

The Behavioral Skills Program (BSP) is a relatively long term treatment and educational alternative for children and youth with extremely severe levels of problems in behavioral, emotional, and social functioning and thought areas. These children have have exhausted every less restrictive alternative available and most have been treated in highly restrictive settings such as hospitals.

It is evident that students referred to BSP exhibit a significantly more severe level of problem behaviors and individual and family risk factors than the general population with EBD. These child fall in the top two percent of the population in terms of teacher rating of problem behavior. Home school and BSP teachers significantly agree on behavior rating assessment of these children.

Students of BSP experience higher levels of individual and family risk factors than the general BD population in Nebraska and when compared to literature documenting the level of stress factors associated

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with significant maladjustment of the population nationally. Illbeck (1991) in as assessment of the Kentucky IMPACT Program documented a lower number of risk factors associated with students with severely disturbed children than the number experienced by BSP students. These results provide a quantified measure that BSP students exhibit a level of behavioral and emotional dysfunction to warrant the level of restrictive intervention provided by BSP.

Previous research indicate the EBD population is extremely resistant to treatment and require long term, intensive support to be maintained in the community (Sayegh & Grizenko, 1991; Gable & Finn, 1986; Zimet & Farley, 1985). These children generally have a "poor fit" with regular school environments and previous research indicates that most of these students will not successfully return to regular school settings. Knitzer, et al. (1990) criticized current interventions for children with EBD as focusing on behavior control of students in restrictive educational programs that are remedial.

The students at the BSP did exhibit significant improvement in academic achievement or maintained normal academic development. This is a remarkable finding in the context of previous research indicating that in general day treatment programs do not do a good job in creating such gains.

These results confirm the view that children with EBD respond best to treatment environments that provide opportunity for academic success, rewards for prosocial behavior, provides a positive relationship with adults who model and train prosocial behavior and values, and that focuses on student strengths and adjustment to the educational environment (Goldstein, Harootunian & Conoley,1994; Knitzer, et al.,1990). The staff of BSP have created an environment which focuses on development of close, trusting relationships with students, provides a safe environment where extensive amounts of time can be spent on resolving behavior problems, and where there is a persistent pursuit to find a way to teach each child.

The results of standardized behavior assessment did not indicate significant change. Performance on IEP behavior goals proved to be a more responsive indicators of behavior improvement than the CBCL-TRF. Documentation of progress on IEP goals did indicate immediate improvement in behavior but the changes tended to plateau over time. BSP students represent the most severe portion of

the population and behavior goals focus on the most problematic behaviors, usually aggression. This population produces behavior problems that are particularly intractable and unmanageable in regular settings (Glavin, Quay, & Werry, 1971). However, when effect sizes are considered it is apparent that while secondary student appear to worsen the elementary students do show promising gains. It should be noted that the comparison of problem behavior ratings did not indicate any significant deterioration. Given the severity of problems and risk factors that the participant population experience the lack of deterioration of problem behavior ratings can be seen as an indicator of positive progress.

Overall teachers' ratings do report that students have made improvement. This may indicate that overall functional behavior that may not be specified in the IEP goals are being exhibited by students. The improvement in IEP goals in the category of classroom skills, self esteem, coping skills, and peer/adult interaction indicate that BSP is an environment that can manage aggressive behavior and at the same time give these children an opportunity to succeed and learn to self manage their behavior.

Elementary students made the largest gains in both academic and behavioral measures indicating early intervention is an important treatment consideration. These results and continued data collection can be used to determine what program components are most effective and be used to assure that the program continues to maintain its success in developing academic and behavioral skills for children with severe levels of BD.

In conclusion, this study sought to overcome many of the methodological problems of previous studies and to produce strong statistical testing of the data. Standardized assessments and data collected on IEP goals with specific behavioral descriptors were used to measure progress of students. The data was analyzed for statistical significance in addition to producing descriptive statistics of student characteristics and individual and family risk factors experienced. While this study did not overcome all the methodological barriers to research of actual programs significant empirical evidence of day treatment effectiveness was provided. Future research should continue to refine research methods. In addition, the focus of further work should be to identify specific methods, techniques or interpersonal approaches and attitudes used in

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the program that are effective, and comparisons of data year to year and assess individual differences in progress based on length of stay.

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